



Energy-Related Environmental Research



Public Interest Energy Research Environmental Area (PIER-EA) Gina Barkalow

Environmental Exploratory Grant Program
(EEGP)

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PIER Background

- Evolved from \$120 million/year IOU R&D Program - required before deregulation
- 1996 AB 1890 mandated deregulation - also created PIER Program - 1997 SB 90 made technical amendments for efficient implementation
- 2000 SB 1194 & AB 995 extended PIER 2011
- Supports “public interest” R&D not adequately provided by private and regulated markets - \$61.8 million annually
- Energy Commission will also conduct natural gas R&D— program being developed – 1st year \$12M



PIER Subject Areas

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- Renewable Energy
 - Environmentally-Preferred Advanced Generation
 - Buildings Energy-Efficiency
 - Industry/Agriculture/Water Energy Efficiency
 - Energy Systems Integration
 - **Energy-Related Environmental Research**

PIER-EA Mission

Develop approaches for evaluating, resolving and minimizing environmental impacts of energy production, delivery, and use in California, and explore how new applications and products can solve environmental problems



PIER-EA Major Goals

- **Improve understanding and develop solutions for reducing biological, water-related, and air quality impacts of the electricity system**
- **Understand the nature/significance of global climate change, its relationship to electricity generation and use, and develop strategies and solutions for impact mitigation and adaptation**
- **Create the knowledge base for sound decision-making and informed environmental policy relative to electricity markets and technology**




PIER-EA Subject Areas

- Land Use and Habitat
- Aquatic Resources
- Outdoor and Indoor Air Quality
- Global Climate Change

www.energy.ca.gov/pier/environmental/index.html



PIER-EA Progress

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- PIER-EA completed Environmental Plan
- identified high-priority research
 - Subject Areas preparing detailed research plans for high-priority issues and funding identified research projects
 - **Environmental Exploratory program designed to look at new initiatives currently not being considered**





PIER-EA Environmental Exploratory Grant Program

■ Goal:

- Support the early development of promising, new scientific concepts that have the potential to impact the way we understand and/or address energy-related environmental issues

■ Objective:

- Fund projects that will provide foundational information necessary for more focused, larger scale RD&D projects that support the PIER-EA mission





PIER-EA Environmental Exploratory Grant Program

- 1st solicitation in 2003 – Commission funded 10 projects
- 2nd solicitation in 2004 – Commission funded 6 projects
- 3rd solicitation is currently underway:
www.energy.ca.gov/contracts





Environmental Exploratory Grant Program Contact Information:

California Energy Commission

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